

ABSTRACT OF THE DISCLOSURE

METHOD AND APPARATUS FOR REGENERATION OF
PARTICULATE FILTER USING MICROWAVE ENERGY

A regeneration system includes at least two microwave sources for producing microwaves. There is also a microwave cavity in communication with the microwave sources to receive the microwaves. Additionally, there is a particulate filter disposed in the cavity which is heated by the microwaves in the cavity. Alternatively, there can be at least one microwave source with the microwave cavity having a plurality of ports through which microwaves from the microwave source enter the cavity. A method for regenerating a particulate filter comprising the steps of passing exhaust through the particulate filter. Then, there is the step of heating the particulate filter from a plurality of directions with microwaves.